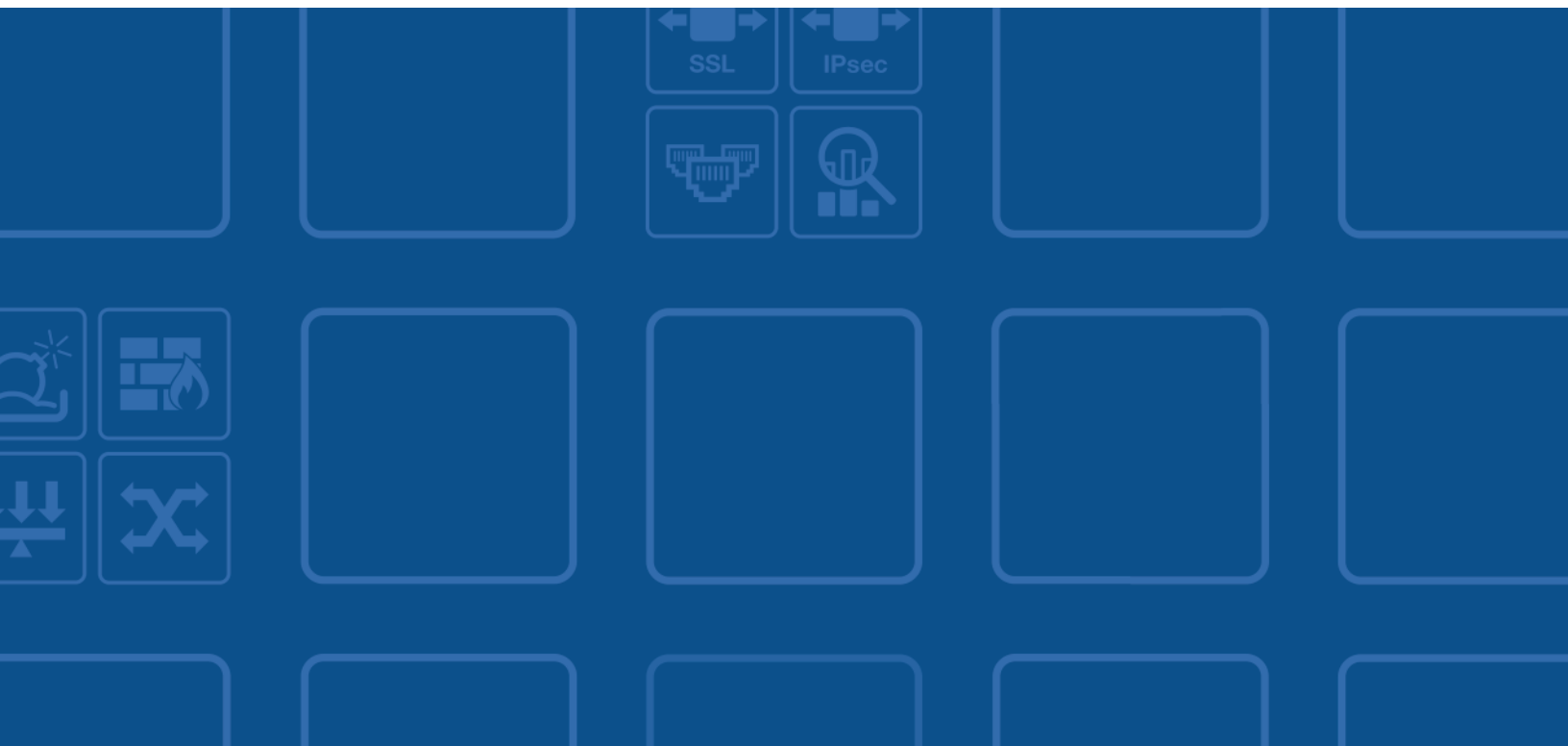
FORTINET
High Performance Network Security

FortiAnalyzer - Release Notes

VERSION 5.4.1



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December 29, 2016

FortiAnalyzer - Release Notes

05-541-370529-20161229

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Change Log

Date	Change Description
2016-06-29	Updated for 5.4.1 release
2016-07-05	Updated to add support for FortiOS 5.2.8 and remove 374261 from Known Issues.
2016-07-07	Updated to add a special notice and the following known issue: 375575.
2016-08-03	Updated to add the following known issues: 378763, 381559.
2016-09-12	Updated to add the following known issue: 387011.
2016-09-20	Updated to add the following known issue: 388071.
2016-09-30	Updated to add the following resolved issue: 371045.
2016-10-11	Updated to add support for FortiOS 5.2.9.
2016-11-01	Updated to add a *FortiGate Management* section to provide information about supported modules for FortiAnalyzer with FortiManager enabled.
2016-11-25	Updated to add support for FortiOS 5.4.2.
2016-12-01	Updated to add support for FortiOS 5.2.10.
2016-12-21	Updated to add support for FortiOS 5.4.3.
2016-12-29	Added special notice about Hyper-V FortiAnalyzer-VM running on an AMD CPU.

Introduction

This document provides the following information for FortiAnalyzer version 5.4.1 build 1082:

For more information on upgrading your FortiAnalyzer device, see the *FortiAnalyzer Upgrade Guide*.

Supported models

FortiAnalyzer version 5.4.1 supports the following models:

FortiAnalyzer	FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, and FAZ-4000B.
FortiAnalyzer VM	FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-XEN (Citrix XenServer and Open Source Xen), FAZ-VM64-KVM, and FAZ-VM64-AWS.

What's new in FortiAnalyzer version 5.4.1

The following is a list of new features and enhancements in FortiAnalyzer version 5.4.1.

Security Service—Indicators of Compromise

A new, dynamically updated engine and signature service is now available for FortiAnalyzer. The IOC engine will match logs against the IOC signatures to look for any potential compromised hosts. Note that botnets and other malware change rapidly, so the service runs against both new *and* historic logs for each signature/engine update.

FortiView

Export to Chart/Report

You can use the FortiAnalyzer GUI to export a FortiView—including any filters—to a custom chart. This new chart is saved in the chart library and can be used in the generated reports.

JSON API Support

An extension of the JSON API allows remote systems to query and retrieve FortiView data.

FortiClient Vulnerability Detection

A new FortiView allows you to monitor FortiClient vulnerability detection and remediation.

EMS Managed Endpoints

The ADOM for EMS managed FortiClient endpoints now supports the following FortiViews: Top Threats, Top Applications, Top Websites, and All Endpoints.

Performance Optimization

FortiView performance is optimized with the addition of intelligent summaries and caching.

Reports

FortiClient Vulnerability Scan Report

FortiAnalyzer supports the new FortiClient 5.4.1 Vulnerability Scan feature by including a pre-defined report that summarizes all FortiClient endpoints in the network, plus their installed applications and any vulnerabilities.

Diagnostic Tool

You can now generate diagnostic information for each report, and the diagnostic information breaks down the report time taken for each chart in the report. You can use the information to understand why some reports run slower than others. You can download the diagnostic information by using the right-click menu of the report.

Log Forwarding

Field Exclusion

You can control which log fields are sent in forwarded logs. The new capability applies to Syslog or CEF log forwarding.

Log Fetching

Log fetching is a new feature in FortiAnalyzer 5.4, and it enables you to run queries or reports against historic (archived) database for forensic analysis. The log fetcher will query the remote FortiAnalyzer and retrieve the needed data for the specified time period. FortiAnalyzer 5.4.1 includes usability improvements for the setup and authentication between client and server.

Log View

Details Display

Log fields in the details pane are now grouped for better readability.

Case-Insensitive Search

Case-insensitive search is now set as the default search option for Log View.

Special Notices

This section highlights some of the operational changes that administrators should be aware of in FortiAnalyzer version 5.4.1.

Hyper-V FortiAnalyzer-VM running on an AMD CPU

A Hyper-V FAZ-VM running on a PC with an AMD CPU may experience a kernel panic. Fortinet recommends running VMs on an Intel-based PC.

System Configuration or VM License is Lost after Upgrade

When upgrading FortiAnalyzer from 5.4.0 to 5.4.1, it is imperative to reboot the unit before installing the 5.4.1 firmware image. Please see the *FortiAnalyzer Upgrade Guide* for details about upgrading. Otherwise, FortiAnalyzer may lose system configuration or VM license after upgrade. There are two options to recover the FortiAnalyzer unit:

1. Reconfigure the system configuration or add VM license via CLI with `execute add-vm-license <vm license>`.
2. Restore the 5.4.0 backup and upgrade to 5.4.1.

SSLv3 on FortiAnalyzer-VM64-AWS

Due to known vulnerabilities in the SSLv3 protocol, FortiAnalyzer-VM64-AWS only enables TLSv1 by default. All other models enable both TLSv1 and SSLv3. If you wish to disable SSLv3 support, please run:

```
config system global
    set ssl-protocol t1sv1
end
```

No support for remote SQL database

Starting with FortiAnalyzer software versions 5.0.7 and 5.2.0, remote SQL database support will only cover the insertion of log data into the remote MySQL database. Historical log search and reporting capabilities, which rely on the remote SQL data, will no longer be supported.

Those wishing to use the full set of FortiAnalyzer features are encouraged to switch as soon as possible to storing SQL data locally on the FortiAnalyzer. The local database can be built based upon existing raw logs already stored on the FortiAnalyzer.

Pre-processing logic of ebtime

Logs with the following conditions met are considered usable for the calculation of estimated browsing time:

Traffic logs with `logid` of `13` or `2`, when `logid == 13`, `hostname` must not be empty. The `service` field should be either `HTTP`, `80/TCP` or `443/TCP`.

If all above conditions are met, then `devid`, `vdom`, and `user` (`srcip` if `user` is empty) are combined as a key to identify a user. For time estimation, the current value of `duration` is calculated against history session start and end time, only un-overlapped part are used as the `ebtime` of the current log.

In version 5.0.5 or later, Explicit Proxy logs (`logid=10)` are checked when calculating the estimated browsing time.

ConnectWise Management Services Platform (MSP) support

ConnectWise Management Services Platform (MSP) is not supported.

Log Aggregation or Forwarding

Log aggregation or forwarding works from 5.4 to 5.4 or 5.4.1 to 5.4.1. Please use the same FortiAnalyzer version on all the units. Other FortiAnalyzer versions not supported.

Upgrade Information

Upgrading to FortiAnalyzer 5.4.1

You can upgrade FortiAnalyzer 5.2.0 or later directly to 5.4.1.If you are upgrading from versions earlier than 5.2.0, you will need to upgrade to FortiAnalyzer 5.2 first. (We recommend that you upgrade to 5.2.7, the latest version of FortiAnalyzer 5.2.)

For details about upgrading your FortiAnalyzer, see *FortiAnalyzer Upgrade Guide*.

Downgrading to previous versions

FortiAnalyzer does not provide a full downgrade path. You can downgrade to a previous firmware release via the GUI or CLI, but doing so results in configuration loss. A system reset is required after the firmware downgrading process has completed. To reset the system, use the following CLI commands via a console port connection:

```
execute reset all-settings
execute format {disk | disk-ext4}
```

Firmware image checksums

The MD5 checksums for all Fortinet software and firmware releases are available at the Customer Service & Support portal, https://support.fortinet.com. To verify the integrity of the download, select the *Checksum* link next to the *HTTPS* download link. A dialog box will be displayed with the image file name and checksum code. Compare this checksum with the checksum of the firmware image.

FortiAnalyzer VM firmware

Fortinet provides FortiAnalyzer VM firmware images for Amazon AWS, Citrix and Open Source XenServer, Linux KVM, Microsoft Hyper-V Server, and VMware ESX/ESXi virtualization environments.

Amazon Web Services

- The 64-bit Amazon Machine Image (AMI) is available on the AWS marketplace.

Citrix XenServer and Open Source XenServer

- `.out`: Download the 64-bit firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.out.OpenXen.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains the QCOW2 file for the Open Source Xen Server.
- `.out.CitrixXen.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains the Citrix XenServer Disk (VHD), and OVF files.

Linux KVM

- `.out`: Download the 64-bit firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.out.kvm.zip`: Download the 64-bit package for a new FortiAnalyzer VM installation. This package contains QCOW2 that can be used by qemu.

Microsoft Azure

The files for Microsoft Azure have AZURE in the filenames, for example `FAZ_VM64_AZURE-v<number>-build<number>-FORTINET.out.hyperv.zip`.

- `.out`: Download the firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.hyperv.zip`: Download the package for a new FortiAnalyzer VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Azure.

Microsoft Hyper-V Server

The files for Microsoft Hyper-V Server have HV in the filenames, for example, `FAZ_VM64_HV-v<number>-build<number>-FORTINET.out.hyperv.zip`.

- `.out`: Download the firmware image to upgrade your existing FortiAnalyzer VM installation.
- `.hyperv.zip`: Download the package for a new FortiAnalyzer VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Hyper-V Server.

VMware ESX/ESXi

- `.out`: Download either the 64-bit firmware image to upgrade your existing VM installation.
- `.ovf.zip`: Download either the 64-bit package for a new VM installation. This package contains an Open Virtualization Format (OVF) file for VMware and two Virtual Machine Disk Format (VMDK) files used by the OVF file during deployment.

For more information see the FortiManager product data sheet available on the Fortinet web site, http://www.fortinet.com/products/fortimanager/virtual-security-management.html. VM installation guides are available in the Fortinet Document Library.

SNMP MIB files

You can download the *FORTINET-FORTIMANAGER-FORTIANALYZER.mib* MIB file in the firmware image file folder. The Fortinet Core MIB file is located in the main FortiAnalyzer v5.00 file folder.

Product Integration and Support

FortiAnalyzer version 5.4.1 support

The following table lists FortiAnalyzer version 5.4.1 product integration and support information:

Web Browsers	• Microsoft Internet Explorer 11.0 • Mozilla Firefox version 46 • Google Chrome version 50 Other web browsers may function correctly, but are not supported by Fortinet.
FortiOS/FortiOS Carrier	• 5.4.0 to 5.4.3 • 5.2.0 to 5.2.10 • 5.0.4 to 5.0.12 • 4.3.2 to 4.3.18
FortiAnalyzer	• 5.4.0 to 5.4.1 • 5.2.0 to 5.2.7 • 5.0.0 to 5.0.11
FortiCache	• 4.0.3
FortiClient	• 5.2.0 and later • 5.0.4 and later
FortiMail	• 5.3.3 • 5.2.8 • 5.1.6 • 5.0.10
FortiManager	• 5.4.0 to 5.4.1 • 5.2.0 and later • 5.0.0 and later

FortiSandbox	• 2.2.1 • 2.1.3 • 2.0.3 • 1.4.0 and later • 1.3.0 • 1.2.0 and 1.2.3
FortiSwitch ATCA	• 5.0.0 and later • 4.3.0 and later • 4.2.0 and later
FortiWeb	• 5.5.3 • 5.4.1 • 5.3.8 • 5.2.4 • 5.1.4 • 5.0.6
FortiDDoS	• 4.2.1 • 4.1.12

Virtualization	• Amazon Web Service AMI, Amazon EC2, Amazon EBS
	• Citrix XenServer 6.2
	• Linux KVM Redhat 6.5
	• Microsoft Azure
	• Microsoft Hyper-V Server 2008 R2, 2012 & 2012 R2
	• OpenSource XenServer 4.2.5
	• VMware:
	  • ESX versions 4.0 and 4.1
	  • ESXi versions 4.0, 4.1, 5.0, 5.1, 5.5, and 6.0

Always review the Release Notes of the supported platform firmware version before upgrading your device.

Feature support

The following table lists FortiAnalyzer feature support for log devices.

Platform	Log View	FortiView	Event Management	Reports
FortiGate	✓	✓	✓	✓
FortiCarrier	✓	✓	✓	✓
FortiAnalyzer	✓		✓	
FortiCache	✓		✓	✓
FortiClient registered to FortiGate	✓	✓		✓
FortiClient registered to FortiClient EMS	✓	✓		✓
FortiDDoS	✓	✓	✓	✓
FortiMail	✓		✓	✓
FortiManager	✓		✓	
FortiSandbox	✓		✓	✓
FortiWeb	✓		✓	✓
Syslog	✓		✓	

FortiGate Management

You can enable FortiManager features on some FortiAnalyzer models. FortiAnalyzer models with FortiManager features enabled can manage a small number of FortiGate devices, and all but a few FortiManager features are enabled on FortiAnalyzer. The following table lists the supported modules for FortiAnalyzer with FortiManager Features enabled:

FortiManager Management Modules	FortiAnalyzer with FortiManager Features Enabled
Device Manager	✓
Policy & Objects	✓
AP Manager	✓

FortiManager Management Modules	FortiAnalyzer with FortiManager Features Enabled
FortiClient Manager	✓
VPN Manager	✓
FortiGuard	
FortiMeter	
FGT-VM License Activation	

Language support

The following table lists FortiAnalyzer language support information.

Language	GUI	Reports
English	✓	✓
Chinese (Simplified)	✓	✓
Chinese (Traditional)	✓	✓
French		✓
Hebrew		✓
Hungarian		✓
Japanese	✓	✓
Korean	✓	✓
Portuguese		✓
Russian		✓
Spanish		✓

To change the FortiAnalyzer language setting, go to *System Settings* > *Admin* > *Admin Settings*, in *Administrative Settings* > *Language* select the desired language from the drop-down list. The default value is *Auto Detect*.

Russian, Hebrew, and Hungarian are not included in the default report languages. You can import language translation files for these languages via the command line interface using one of the following commands:

```
execute sql-report import-lang <language name> <ftp> <server IP address> <user name>
    <password> <file name>
```

```
execute sql-report import-lang <language name> <sftp <server IP address> <user name>
    <password> <file name>
execute sql-report import-lang <language name> <scp> <server IP address> <user name>
    <password> <file name>
execute sql-report import-lang <language name> <tftp> <server IP address> <file name>
```

For more information, see the *FortiAnalyzer CLI Reference*.

Supported models

The following tables list which FortiGate, FortiCarrier, FortiDDoS, FortiAnalyzer, FortiMail, FortiManager, FortiWeb, FortiCache, and FortiSandbox models and firmware versions can log to a FortiAnalyzer appliance running version 5.4.1. Please ensure that the log devices are supported before completing the upgrade.

FortiGate models

Model	Firmware Version
FortiGate: FG-80C-DC, FG-80C-LENC, FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-INTL, FG-30E-3G4G-NAM, FG-50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-60E-3G4G-NAEU, FG-60E-POE, FG-61E, FG-70D, FG-70D-POE, FG-80C, FG-80C-LENC, FG-80CM, FG-80D, FG-90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-101E, FG-140D, FG-140D-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FGT-280D-POE, FGT-300D, FG-400D, FG-500D, FG-600C, FG-600D, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1500D, FG-3000D, FG-3100D, FG-3200D, FG-3240C, FG-3600C, FG-3700D, FG-3700DX, FG-3810D, FG-3815D, FG-2000E, FG-2500E, FG 3800D **FortiGate 5000 Series:** FG-5001C, FG-5001D **FortiGate DC:** FG-80C-DC, FG-600C-DC, FG-800C-DC, FG-1000C-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3810D-DC **FortiGate Low Encryption:** FG-100D-LENC, FG-600C-LENC, FG-1000C-LENC **FortiWiFi:** FWF-30D, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-51E, FWF-30D-POE, FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE, FWF-92D, FWF-60E, FWF-61E, FWF-80CM, FWF-81CM **FortiGate VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN **FortiGate Rugged:** FGR-30D, FGR-35D, FGR-60D, FGR-90D	5.4

Model	Firmware Version
FortiGate: FG-20C, FG-20C-ADSL-A, FG-30D, FG-30D-POE, FG-40C, FG-60C, FG-60C-POE, FG-60C-SFP, FG-60D, FG-60D-3G4G-VZW, FG-60D-POE, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-110C, FG-111C, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200B, FG-200B-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-300C, FG-300D, FG-310B, FG-311B, FG-400D, FG-500D, FG-600D, FG-900D, FG-600C, FG-620B, FG-621B, FG-800C, FG-800D, FG-1000C, FG-1000D, FG-1200D, FG-1240B, FG-1500D, FG-1500DT, FG-3000D, FG-3016B, FG-3040B, FG-3100D, FG-3140B, FG-3200D, FG-3240C, FG-3600C,FG-3700D, FG-3700DX, FG-3810A, FG-3810D, FG-3815D, FG-3950B, FG-3951B **FortiGate 5000 Series:** FG-5001A, FG-5001A-SW, FG-5001A-LENC, FG-5001A-DW-LENC, FG-5001A-SW-LENC, FG-5001B, FG-5001C, FG-5001D, FG-5101C **FortiGate DC:** FG-80C-DC, FG-300C-DC, FG-310B-DC, FG-600C-DC, FG-620B-DC, FG-621B-DC, FG-800C-DC, FG-1000C-DC, FG-1240B-DC, FG-3000D-DC, FG-3040B-DC, FG-3100D-DC, FG-3140B-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, G-3700D-DC, FG-3810A-DC, FG-3810D-DC, FG-3815D-DC, FG-3950B-DC, FG-3951B-DC **FortiGate Low Encryption:** FG-20C-LENC, FG-40C-LENC, FG-60C-LENC, FG-80C-LENC, FG-100D-LENC, FG-200B-LENC, FG-300C-LENC, FG-620B-LENC, FG-1000C-LENC, FG-1240B-LENC, FG-3040B-LENC, FG-310B-LENC, FG-600C-LENC, FG-3140B-LENC, FG-3810A-LENC, FG-3950B-LENC **FortiWiFi:** FWF-20C, FWF-20C-ADSL-A, FWF-30D, FWF-30D-POE, FWF-40C, FWF-60C, FWF-60CM, FWF-60CX-ADSL-A, FWF-60D, FWF-60D-3G4G-VZW, FWF-60D-POE, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate Rugged:** FGR-60D, FGR-100C **FortiGate VM:** FG-VM-Azure, FG-VM, FG-VM64, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN **FortiSwitch:** FS-5203B, FCT-5902D	5.2

Model	Firmware Version
FortiGate: FG-20C, FG-20C-ADSL-A, FG-30D, FG-30D-POE, FG-40C, FG-60C, FG-60C-POE, FG-60C-SFP, FG-60D, FG-60D-3G4G-VZW, FG-60D-POE, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-110C, FG-111C, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200B, FG-200B-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-300C, FG-300D, FG-310B, FG-311B, FG-500D, FG-600C, FG-620B, FG-621B, FG-700D, FG-800C, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1240B, FG-1500D, FG-3000D, FG-3016B, FG-3040B, FG-3100D, FG-3140B, FG-3200D, FG-3240C, FG-3600C, FG-3700D, FG-3810A, FG-3950B, FG-3951B **FortiGate 5000 Series:** FG-5001A, FG-5001A-SW, FG-5001A-LENC, FG-5001A-DW-LENC, FG-5001A-SW-LENC, FG-5001B, FG-5001C, FG-5001D, FG-5101C **FortiGate DC:** FG-80C-DC, FG-300C-DC, FG-310B-DC, FG-600C-DC, FG-620B-DC, FG-621B-DC, FG-800C-DC, FG-1000C-DC, FG-1240B-DC, FG-3000D-DC, FG-3040B-DC, FG-3100D-DC, FG-3140B-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3810A-DC, FG-3950B-DC, FG-3951B-DC **FortiGate Low Encryption:** FG-20C-LENC, FG-40C-LENC, FG-60C-LENC, FG-80C-LENC, FG-100D-LENC, FG-200B-LENC, FG-300C-LENC, FG-310B-LENC, FG-600C-LENC, FG-620B-LENC, FG-1000C-LENC, FG-1240B-LENC, FG-3040B-LENC, FG-3140B-LENC, FG-3810A-LENC, FG-3950B-LENC **FortiWiFi:**FWF-20C, FWF-20C-ADSL-A, FWF-30D, FWF-30D-POE, FWF-40C, FWF-60C, FWF-60CM, FWF-60CX-ADSL-A, FWF-60D, FWF-60D-POE, FWF-60D-3G4G-VZW, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate Rugged:** FGR-60D, FGR-90D, FGR-100C **FortiGateVoice:** FGV-40D2, FGV-70D4 **FortiGate VM**: FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN **FortiSwitch:** FS-5203B	5.0

FortiCarrier Models

Model	Firmware Version
FortiCarrier: FCR-3000D, FCR-3100D, FCR-3200D, FCR-3700D, FCR-3700DX, FCR-3800D, FCR-3810D, FCR-3815D, FCR-5001C, FCR-5001D, FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3240C, FCR-3600C, FCR-3700D-DC, FCR-3810D-DC, FCR-5001C **FortiCarrier DC:** FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3240C-DC, FCR-3600C-DC, FCR-3700D-DC, FCR-3810D-DC, FCR-3815D-DC **FortiCarrier VM:** FCR-VM, FCR-VM64, FCR-VM64-AWS, FCR-VM64-AWSONDEMAND, FCR-VM64-HV, FCR-VM64-KVM	5.4
FortiCarrier: FCR-3000D, FCR-3100D, FCR-3200D, FCR-3240C, FCR-3600C, FCR-3700D, FCR-3700DX, FCR-3810A, FCR-3810D, FCR-3815D, FCR-3950B, FCR-3951B, FCR-5001A, FCR-5001B, FCR-5001C,FCR-5001D, FCR-5101C, FCR5203B, FCR-5902D **FortiCarrier DC:** FCR-3000D-DC, FCR-3100D-DC, FCR-3200D-DC, FCR-3700D-DC, FCR-3810D-DC **FortiCarrier Low Encryption:** FCR-5001A-DW-LENC **FortiCarrier VM:** FCR-VM, FCR-VM64, FCR-VM64-HV, FCR-VM64-KVM, FCR-Vm64-XEN, FCR-VM64-AWSONDEMAND	5.2
FortiCarrier: FCR-3240C, FCR-3600C, FCR-3810A, FCR-3950B, FCR-3951B, FCR-5001A, FCR-5001B, FCR-5001C, FCR-5001D, FCR-5101C **FortiCarrier DC:** FCR-3240C-DC, FCR-3600C-DC, FCR-3810A-DC, FCR-3950B-DC, FCR-3951B-DC **FortiCarrier Low Encryption:** FCR-5001A-DW-LENC **FortiCarrier VM:** FCR-VM, FCR-VM64	5.0

FortiDDoS models

Model	Firmware Version
FortiDDoS: FI-200B, FI-400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-2000B	4.2, 4.1, 4.0

FortiAnalyzer models

Model	Firmware Version
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, and FAZ-4000B. **FortiAnalyzer VM:** FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-XEN (Citrix XenServer and Open Source Xen), FAZ-VM64-KVM, and FAZ-VM64-AWS.	5.4
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-200E, FAZ-300D, FAZ-400C, FAZ-400E, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM-AWS, FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, FAZ-VM64-XEN	5.2
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-200E, FAZ-300D, FAZ-400B, FAZ-400C, FAZ-400E, FAZ-1000B, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000A, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-4000A, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM-KVM, FAZ-VM-XEN	5.0

FortiMail models

Model	Firmware Version
FortiMail: FE-2000E, FE-3000E, FE-3200E **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.3.3
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5002B **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.2.8
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.1.6
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-1000D, FE-2000A, FE-2000B, FE-3000C, FE-3000D, FE-4000A, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.0.10

FortiSandbox models

Model	Firmware Version
FortiSandbox: FSA-1000D, FSA-3000D, FSA-3500D **FortiSandbox VM:** FSA-VM	2.2.0 2.1.0
FortiSandbox: FSA-1000D, FSA-3000D **FortiSandbox VM:** FSA-VM	2.0.0 1.4.2
FortiSandbox: FSA-1000D, FSA-3000D	1.4.0 and 1.4.1 1.3.0 1.2.0 and later

FortiSwitch ACTA models

Model	Firmware Version
FortiController: FTCL-5103B, FTCL-5902D, FTCL-5903C, FTCL-59	5.2.0
FortiSwitch-ATCA: FS-5003A, FS-5003B **FortiController:** FTCL-5103B, FTCL-5903C, FTCL-5913C	5.0.0
FortiSwitch-ATCA: FS-5003A, FS-5003B	4.3.0 4.2.0

FortiWeb models

Model	Firmware Version
FortiWeb: FWB-100D, FWB-400C, FWB-400D, FWB-1000C, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV, FWB-KVM, FWB-AZURE	5.5.3
FortiWeb: FWB-100D, FWB-400C, FWB-1000C, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV	5.4.1

Model	Firmware Version
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, and FWB-HYPERV	5.3.8
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-HYPERV,FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER	5.2.4

FortiCache models

Model	Firmware Version
FortiCache: FCH-400C, FCH-400E, FCH-1000C, FCH-1000D, FCH-3000C, FCH-3000D, FCH-3900E **FortiCache VM:** FCH-VM64	4.0

Resolved Issues

The following issues have been fixed in FortiAnalyzer version 5.4.1. For inquires about a particular bug, please contact Customer Service & Support.

Device Manager

Bug ID	Description
309353	FortiAnalyzer may be able to receive logs from a FortiGate HA cluster.
372066	FortiAnalyzer cannot identify FortiWeb-AWS' serial number.

Event Management

Bug ID	Description
355640	FortiAnalyzer sends notifications of outdated alerts after upgraded to version 5.2.
366158	Some Email clients fail to receive Email notification from FortiAnalyzer as the MIME-Version: 1.0 header is missing.
369686	Log generated by proxy option does not trigger event handler using generic text filter.

FortiView

Bug ID	Description
252483	The same log source is shown for multiple times per device-name and device-type.
266218	After an upgrade, the inherited column settings may cause an error in the Log View which stops the list displaying properly.
279389	Japanese characters displayed under DLP archive log are garbled.
308387	Report does not resolve all hostnames to domain names.
308847	Users may not be able to view logs due to corrupted log entries.
309132	FortiAnalyzer may not be able to show the proper FortiMail subtypes.

Bug ID	Description
355774	Threat Map may not work on FortiGate HA cluster.
355889	FortiAnalyzer returns query failed error when browsing traffic logs.
356293	FortiAnalyzer is not able to import hostname from wlog into traffic logs.
365200	The line chart for resource usage is missing a scroll bar.
371269	Log View is stuck in loading status and backend returns error when downloading logs as .csv or text file.
374842	FortiAnalyzer can only display three days of data on resource usage drilldown.
376459	When two or more wildcard IP filters are set, FortiAnalyzer shows *No Entry Found* in Log View.

Logging

Bug ID	Description
366011	Syslogs forwarded by FortiAnalyzer do not contain the proper FortiGate's serial number.

Reporting

Bug ID	Description
306989	Filters may not get applied on generated reports.
364100	Custom rate datasets display negative numbers.
366005	Users cannot view data bindings of a chart.
367016	The Top 5 Users by Bandwidth reports the first five users with same IP.
357583	Bar chart is not generated when there is only a single data point.
365596	Japanese characters may not display correctly.
302383	Unit of measurement is missing on the y axis of a chart.
308171	Duration should be consistent across reporting and FortiView menus.

System Settings

Bug ID	Description
366721	Threat Map shows the error message: `Error 403 You don't have saving permission` when an administrator with a read-only profile accesses the Threat Map.

Others

Bug ID	Description
275009	The fazmaild daemon may crash and FortiAnalyzer may not be able to send out Emails.
292208	Users may not be able to retrieve IPS archive with the `getFazArchieve` XML API call.
355841	The `runFazReport` XML API call with a long user filter triggers FortiAnalyzer to return the message, `Maximum filter length should be no more than 512 chars`
308724	LVM may not show the correct disk size.
370752	Uploaded log files may not be correctly zipped or saved.
370872	Rebuilding SQL may freeze during upgrade.
365505	FortiAnalyzer should show a clear warning when setting a quota that would result in logs being deleted.

Common Vulnerabilities and Exposures

Bug ID	Description
371045	FortiAnalyzer 5.4.1 is no longer vulnerable to the following CVE-References: • 2016-2176 • 2016-2109 • 2016-2108 • 2016-2107 • 2016-2106 • 2016-2105 Visit https://fortiguard.com/psirt for more information.

Known Issues

The following issues have been identified in FortiAnalyzer version 5.4.1. For inquires about a particular bug or to report a bug, please contact Fortinet Customer Service & Support.

Device Manager

Bug ID	Description
376207	FortiAnalyzer shows incorrect version for FortiDDoS devices.

Event Management

Bug ID	Description
273023	There is no column to display device names that triggered events.

Logging

Bug ID	Description
366332	Log import process may stop after 1000 log files are imported.
376136	FortiAnalyzer may drop device log tables while device and ADOM quota are not full.
378763	When SFTP server is down, FortiAnalyzer no longer re-connects to the server again. **Workaround**: Please restart the `uploadd` daemon with: 1. Run `diagnose system process list` to identify the uploadd's PID. 2. Run `diagnose kill -9 <uploadd's PID>` to restart the daemon.
381559	FortiAnalyzer cannot receive aggregated logs that belong to a FortiGate HA cluster.
387011	FortiAnalyzer should enforce quota size and control for achieved files.

Reporting

Bug ID	Description
373718	Reports present devices with serial numbers instead of host names.

System Settings

Bug ID	Description
366013	Users should not be allowed to allocate 100% of disk space for indexing logs.
298115	In order to use the log fetching feature, all FortiAnalyzer units are required to have the same firmware version.

Others

Bug ID	Description
375575	FortiAnalyzer may lose configuration or VM license after upgrade. **Workaround**: Please see the following special notice System Configuration or VM License is Lost after Upgrade on page 9.
388071	FortiAnalyzer may not be able to render a proper web GUI page when making a change.

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